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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/566,307	01/27/2006	Dean Kamen	1062/E19	4217

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EXAMINER	
LAUGHLIN, NATHAN L	
ART UNIT	**PAPER NUMBER**
2125	

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/566,307	KAMEN ET AL.	
	Examiner	Art Unit	
	Nate Laughlin	2125	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE ____ MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *7-18-07*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-24* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-24* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *27 January 2006* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Final Rejection

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claim 24 is rejected under 35 U.S.C. 102(e) as being anticipated by Aldridge (U.S. PG PUB 20050154499).

As to claim 24, Aldridge teaches a method comprising: providing a generator to a user; monitoring at least one index of generator usage to supply a utility; and charging the user on the basis of the index of generator usage [0011, 0036]. Aldridge teaches providing a generator to a user and monitoring the usage so that an accurate charge can be given to each consumer.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

4. Claim 1-2, 11-13, and 21-23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gardener (U.S. PG Pub. 2002/0024332) in view of Staphanos (U. S. PG Pub. 2005/0188745).

As to claim 1, Gardener teaches a system comprising: a generation device for converting an available resource to a desired utility (fig. 1 element 11), the generation device characterized by a plurality of operating parameters [0007]; b. an input sensor for measuring input to the generation device [0014]; c. an output sensor for measuring consumption of output from the generation device [0014];
d. a controller for concatenating measured input and consumption of output on the basis of the input and output sensors[0008].

As to claim 2, Gardener teaches a sensor for measuring at least one parameter of the said plurality of operating parameters of the generation device (fig. 6b).

As to claim 11, Gardener teaches the generation device is an electrical power generator (fig. 11).

As to claim 12, Gardener teaches an input sensor includes a fuel consumption rate monitor [0014].

As to claim 13, Gardener teaches an output sensor includes an electrical usage meter monitor [0014].

As to claim 17, Gardener teaches a remote actuator for varying operating parameters of the generator based on remotely received instructions [0048].

As to claim 21, Gardener teaches a system comprising: providing a generation device (fig. 1 element 11); coupling an input sensor for measuring input to the generation device [0014]; coupling an output sensor for measuring consumption of output from the generation device [0014]; and coupling a controller to the input and output sensor for concatenating measured input and consumption of output on the basis of the input and output sensors [0008].

As to claim 22, Gardener teaches providing communication between a telemetry module and said controller (fig. 1a); and providing communication between said telemetry module and a monitoring station (fig. 1a).

As to claim 23, Gardener teaches a distributed network of utilities comprising: generators for converting a resource into a useful utility (fig. element 11); input sensors

for measuring inputs to respective generators [0014]; output sensor for measuring consumption of output from respective generators [0014]; a telemetry transmitter for transmitting input and output parameters of a specified generator (fig. 1a); and a remote processor for receiving input and output parameters from a plurality of utility generators (fig. 1a, elements 30, 20).

Gardner teaches most of the claimed invention, but does fail to teach a remote controller. This is very well known in the art. Staphanos teaches that a generator supply a utility to a system can be both monitored and controlled by a remote controller.

As to claims 1 and 20, Staphanos teaches a remote controller that can monitor data from generation devices and from the data the devices can be controlled both locally and remotely [0052,0053,0055,0056].

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was created have included a remote controller into system as described by Gardner. The motivation to combine is using a centralized (remote) controller that provided control and reporting function allows cost reductions associated with operations.

5. Claims 1, 5-7, 9-10 are rejected under 35 U.S.C. 103(a) as being anticipated by Singhvi et al (U.S. Pat. 6,408,227) in view of Staphanos (U. S. PG Pub. 2005/0188745).

As to claim 1, Singhvi teaches a system comprising: a generation device for converting an available resource to a desired utility (fig. 1 element 166), the generation device characterized by a plurality of operating parameters (Table 1, col. 9); b. an input sensor for measuring input to the generation device (Table 1, col. 9); c. an output sensor for measuring consumption of output from the generation device (fig. 2 element 250); a controller for concatenating measured input and consumption of output on the basis of the input and output sensors (fig. 2 element 260, Table 1, col. 9). Singhvi teaches using water related inputs and outputs from the purification process to control the system.

As to claim 5, Singhvi teaches generation device is a water purifier (fig. 2).

As to claim 6, Singhvi teaches wherein the input sensor is a flowrate monitor (Table 1, col. 9).

As to claim 7, Singhvi teaches wherein the output sensor includes a water quality sensor including at least one of a turbidity, conductivity, and temperature sensor (Table 1, col. 9).

As to claim 9, Singhvi teaches an alarm that alerts a user when said water quality value rises above a pre-programmed water quality value (col. 6 lines 28-35).

Singhvi teaches most of the claimed invention, but does fail to teach a remote controller. This is very well known in the art. Staphanos teaches that a generator supply a utility to a system can be both monitored and controlled by a remote controller.

As to claims 1 and 20, Staphanos teaches a remote controller that can monitor data from generation devices and from the data the devices can be controlled both locally and remotely [0052,0053,0055,0056].

As to claim 10, Staphanos teaches a remotely operable shut off switch [0045].

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was created have included a remote controller into the system as described by Singhvi. The motivation to combine is using a centralized (remote) controller that provided control and reporting function allows cost reductions associated with operations.

6. Claims 14-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Singhvi (U.S. Pat. 6,408,227) in view of Staphanos (U. S. PG Pub. 2005/0188745) in further view of Wolfe (U.S. Pat. 6,954,701).

Singhvi and Staphanos teach a water treatment system where inputs and outputs from sensor data are used within the system for controlling purposes with a remote

controller. Neither Singhvi nor Staphanos teach a telemetry module that communicates to a remote site. However, Wolfe teaches the limitations as follows:

As to claim 14, Wolfe teaches a monitoring system comprising a telemetry module for communicating measured input and output parameters to a remote site (fig. 1).

As to claim 15, Wolfe teaches the telemetry module is a cellular communications system (col. 5 lines 10-34).

As to claim 16, Wolfe teaches a telemetry module is a wireless system (col. 5 lines 10-34).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to use the telemetry module of Wolfe in the monitoring system of Singhvi further modified by Staphanos, the motivation to combine is a real time analysis by highly trained personnel that may not be at the treatment site can occur when the data is sent to remote locations (col. 2 lines 25-30).

7. Claims 18-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Singhvi (U.S. Pat. 6,408,227)) in view of Staphanos (U. S. PG Pub. 2005/0188745) in further view of Tucker (U.S. Pat. 6,568,416).

Singhvi and Staphanos teach a generating system that is monitored and controlled using input and output sensors with a remote controller. Neither Singhvi nor Staphanos explicitly teach using a GPS as a self-locating device. However, Tucker shows a generating device that uses a GPS to modify operating conditions.

As to claim 18, Tucker teaches a self-locating device having an output indicative of the location of the monitoring system (col. 12 lines 47-66).

As to claim 19, Tucker teaches the self-locating device is a global positioning system (col. 12 lines 47-66).

As to claim 20, Tucker teaches monitored characteristics of input and output depend upon the location of the monitoring system (col. 12 lines 47-66).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have included a GPS component as done in Tucker into the monitoring system of Singhvi further modified by Staphanos. The motivation to combine is using GPS systems can increase precision and reduce errors (col. 1 line 63-col. 2 line 10).

8. Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Singhvi (U.S. Pat. 6,408,227)) in view of Staphanos (U. S. PG Pub. 2005/0188745) in further view of Underwood (U.S. PG Pub. 2003/0220717).

Singhvi and Staphanos teaches a generating system that is monitored and controlled using input and output sensors. Neither Singhvi nor Staphanos explicitly disclose monitoring flow impedance. However Underwood teaches a system that monitors flow impedance.

As to claim 4, Underwood teaches a monitoring system according to claim 1, wherein the at least one sensor is a flow impedance monitor [0035]. Underwood teaches the difference in pressure (flow impedance) through components in a water treatment facility.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was created to include the flow impedance monitor into the monitoring system of Singhvi further modified by Staphanos. The motivation to combine is using the a flow impedance monitor obtained certain levels, then equipment can be consider faulty, and may need replacement [0036].

9. Claim 3 and 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Singhvi (U.S. Pat. 6,408,227)) in view of Staphanos (U. S. PG Pub. 2005/0188745) in futher view of Dosani (U.S. Pat. 5,808,277).

Singhvi and Staphanos teach a generating system that is monitored and controlled using input and output sensors. Neither Singhvi nor Staphanos explicitly teach shutting off the generating device when a threshold is reached; or a heat transfer monitor. However, Dosani teaches these limitations as follows:

As to claim 3, Dosani teaches a sensor is a heat transfer monitor (col. 1 line 33-61).

As to claim 8, Dosani teaches a shut off switch that automatically turns off said generation device when said water quality sensor rises above a pre-programmed water quality value (abstract). Dosani teaches transferring of heat to raise the level of water to clean contaminates from the water, and when a certain temperature is reached, shutting down off the heating unit.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was created to include Dosani sensors into the monitoring system of Singhvi further modified by Staphanos. The motivation to combine is using a thermostat to test the temperature of water, a heating unit can be controlled to ensure

that no bacteria is in the water and ensure water quality (col. 3 lines 33-44, col. 1 line 33-61).

Response to Arguments

10. Applicant's arguments filed 7-18-2007 have been fully considered but they are not persuasive.

As to claim 24, Examiner cited in which a total cost for grid power verses the cost of running a generator. So clearly anyone skilled in the art would realize the cost of running the generator has been calculated and the user will be charged for the time a generator is used. Examiner has cited where the cost of running generator included maintenance of the generator, the fuel that would be used to run the generator and finance charges. It is clear that claim 24 is broad enough to encompass monitoring the usage of a generator and determine the cost a user would incur by using the generator.

Applicant's arguments with respect to claims 1-23 have been considered but are moot in view of the new ground(s) of rejection. Examiner notes that Singhvi does teaches a controller that monitors and controls a system based on inputs and outputs that are linked (fig. 2 and 15).

Conclusion

11. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Inquiry

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Nate Laughlin whose telephone number is 571-270-1042. The examiner can normally be reached on Monday - Friday 8am-5pm with every other Friday off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Leo Picard can be reached on 571-272-3749. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Nate Laughlin 9-28-07

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